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Every Man His Own Brewer.

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A

PRACTICAL TREATISE,

EXPLAINING the ART and MYSTERY of  
BREWING

PORTER,

ALE, TWOPENNY, AND TABLE-BEER;

RECOMMENDING AND PROVING THE

EASE and POSSIBILITY

OF

EVERY MAN'S BREWING HIS OWN BEER,

IN ANY QUANTITY,

*From One Peck to a Hundred Quarters of Malt.*

CALCULATED TO

EXPOSE THE DECEPTION

IN

BREWING,

AND TO

REDUCE THE EXPENSE OF A FAMILY.

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By SAMUEL CHILD, Brewer. *K*

SIXTH EDITION, CORRECTED AND ENLARGED.

"Some COOPERS attempt to extend their Art so far as to add strength to the BEER; but let it be remembered, that the principal constituent parts of Beer *should be* MALT and HOPS; when strength is given to the Liquor by any other means, its nature is altered, and it is no more BEER that we drink."

Combrune's Theory of Brewing.

LONDON:

Printed for J. RIDGWAY, York Street, St. James's Square.

1798.

[Price One Shilling.]



TO THE
P U B L I C.

IT has always been the fate of persons, who, despising private interest, had no object in view but the public good, to meet with a host of enemies: prejudice, interest, influence, and a thousand other obstacles, oppose their endeavours; and nothing but the conviction of truth could effectually secure their success. The author of this small Tract cannot, therefore, expect to escape his share of obloquy and defamation, for exerting his small abilities to serve the labouring part of mankind, and to render their situations more comfortable, by a considerable reduction in their domestic expenses.

The natural constitution of man requires a portion of liquid aliment to assist digestion and nutrition; and the hard-working branches of the community receive from it support, spirit, and strength; it is no wonder then, the ingenuity of man has been exerted to produce liquors at once pleasant to the palate, reviving to the spirits, and productive of support. Gin, brandy, rum, wine, ale, cider, mum, perry, &c. &c. are proofs of the amazing invention of man to supply the defects of nature; but, perhaps, porter, for celebrity, universal use and estimation, has not been equalled by any other liquor. The method of producing this beverage, and the ingredients

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of which it is composed, have been long kept an impenetrable secret. If we consider the immense profits accruing from this secrecy, which the perusal of this Treatise will prove incontrovertibly to any one, it will only be matter of wonder that any person should disclose it to the public; and, indeed, had the author a private interest to serve, he could more profitably promote it by allowing the public still to be blinded; and the veil of mystery to remain unremoved from the art of porter-brewing: but, regardless of interested censure, or prejudiced dislike, he determines to exert his small powers for the general benefit of society, and particularly for the lower classes.

The intention of this Treatise is, to induce the tradesman, the artisan, and the mechanic, to turn their attention to the possibility of supplying themselves and families with a beverage much cheaper, and more nutritive, than porter, and yet retaining all its good qualities, and excluding its noxious ones. This may be done in the smallest families, in the smallest quantities, and with the fewest conveniences, at little more than one-third of the present expense of porter.

The following calculation is taken from one quarter of malt; but it may, as may also the receipt which follows, be reduced in its proportions to a single peck, or multiplied to a thousand, by considering the tables of ale and beer measure, with which every person must be acquainted.

A quarter of malt, with all the ingredients to make good porter, exclusive of time and trouble (for time and trouble must have different values in

in different families, therefore cannot be well estimated by an average calculation), cost little more than 3*l.* 10*s.* From one quarter of malt and the ingredients, may be produced five barrels of porter, which may be sold to the publican at 1*l.* 10*s.* per barrel, equal to 7*l.* 10*s.*; which re-tailed by the publican at seven farthings per pint, or fourteen pence per gallon, amounts to 2*l.* 2*s.* per barrel, or ten guineas for the produce of one quarter of malt: so that the tradesman, mechanic, or artificer, whose family consumes in process of time five barrels of porter, pays ten guineas for what his own care and his wife's attention might supply him with for less than three and a half.

The author of this Treatise has brewed porter for his own consumption several years; he is therefore intimately acquainted with every article which the brewing of porter requires. He pretends not to say that all porter-brewers follow the same receipt: the principal articles it contains are essential to porter; and though several acts of parliament have been enacted to prevent public porter-brewers from using many of them, yet the author can affirm from experience, he could never produce the present flavoured porter without them.

If any person will make trial of the receipt, he will then be enabled to judge whether all porter-brewers do or do not make use of prohibited articles; but while the laws of the country are express, it would ill become any individual to say they are broken daily and hourly for interested purposes.

There are very few families whose expenses in porter may not be rated at three pots per day.

Three

Three pots per day, allowing an extra pot every tenth day, will come to very near nine barrels per year. Allowing for visitors, christenings, &c. &c. the usual incidents of a family, it cannot be thought too extravagant to say, that most families consume nine barrels of porter per year. Nine barrels of porter, paid for at the public-house, cost eighteen guineas; and nine barrels of exactly the same quality, strength, &c. as porter, might be produced, excluding time and trouble, for 6*l.* 7*s.* 11*d.*; leaving to the economical brewer of his own porter a clear profit of 12*l.* 10*s.* 1*d.*, very near twelve guineas, and almost two-thirds of the whole expense. That this calculation may not be objected to as erroneous or improbable, the following statement of the ingredients, and their separate expenses, will convince the most incredulous and disbelieving.

<i>Porter Receipt.</i>			<i>Average Expense.</i>		
			<i>£.</i>	<i>s.</i>	<i>d.</i>
One quarter of malt	—	—	2	2	0
8lb. hops	—	—	0	9	4
9lb. treacle	—	—	0	1	6
8lb. liquorice root	—	—	0	5	4
8lb. essentia bina	—	—	0	4	8
8lb. colour	—	—	0	4	8
Capficum $\frac{1}{2}$ oz.	—	—	0	0	2
Spanish liquorice 10 oz.	—	—	0	0	1
Cocculus Indicus, commonly called					
Oculus India berries, $\frac{1}{4}$ oz.			0	0	2
Salt of tartar 2 drachms	—	—	0	0	1
Heading $\frac{1}{4}$ oz.	—	—	0	0	1
Ginger 3 oz.	—	—	0	0	3
Carried over			3	8	4
			Lime,		

	£.	s.	d.
Brought over	3	8	4
Lime, 4 oz. slacked, and the water, after having received the spirit of the lime, poured into the essentia bina, or colour, in the making	0	0	1
Linseed 1 oz. — — —	0	0	0½
Cinnamon 2 drachms — — —	0	0	1½
	3	8	7
Coals — — —	0	2	9
Total	£ 3	11	4

It must naturally happen that the foregoing statement will surprise many unacquainted with the mysteries of porter-brewing; but some articles demand particular attention. First, the essentia bina, which is compounded of 8lb. of moist sugar, boiled in an iron vessel, for no copper one could withstand the heat sufficiently, till it comes to a thick syrupy consistence, perfectly black, and extremely bitter*.

Secondly, colour, composed of 8lb. of moist sugar, boiled till it obtains a middle state, between bitter and sweet, and which gives to porter that fine mellow colour, usually so much admired in good porter.

These ingredients thus prepared, are added to the first wort, and boiled together with it; this

* When making the essentia and colour, observe, when it is boiled as you think sufficiently to make it liquid enough to pour off into your liquor, you must add a little clear water, or lime water, as you please, to bring it to a proper temper; otherwise it will become a hard dry burnt substance, if suffered to stand till cold, as no water must be put to it till it is burnt enough.

is the basis of porter, a truth sufficiently apparent by reflecting that 6lb. of sugar may generally be had for 3*s.* 6*d.*; a bushel of malt is seldom so low as 5*s.* 6*d.*: upon sugar therefore variously prepared, does porter depend for strength, spirit, and body.

The heading is a mixture of half alum and half copperas, ground to a fine powder, and is so called from giving to porter that beautiful head or froth which constitutes one of the peculiar properties of porter, and which landlords are so anxious to raise to gratify their customers.

The linseed, ginger, lime-water, cinnamon, and several other small articles, may be added or withheld according to the taste, custom, or practice of the brewer, being merely optional, and used solely to give a flavour to the beer: hence it is that so many flavours are distinguishable in porter, and so very few brewers are found to resemble each other in their produce.

Of the other articles it is sufficient to observe, however much they may surprise, however pernicious or disagreeable they may appear, the author has always found them requisites in the brewing of porter, and thinks they must invariably be used by those who wish to continue the taste, flavour, and appearance which they have been accustomed to.

For the benefit of those who live in lodgings, I shall add a calculation for one peck of malt. Many persons have not the convenience of a copper; though doubtless, were my plan to become general, most landlords would find it their interest to provide one for the accommodation of their lodgers, who would be better enabled to

pay their rent, and not have recourse to those evasive tricks, which are now so commonly practised upon small housekeepers by the lower class of lodgers. All persons must have a kettle or a large vessel to boil their clothes, which may be supposed to contain two gallons and a half. Here then is a sufficient substitute for a copper. Every family must have a pail, which will serve as a mash-tub; and a washing-tub will prove an excellent vessel for the liquor to work in. Here then are utensils ready prepared in every family. It is but boring a small hole at the bottom of the pail for the liquor to run through, and your mash-tub is complete; though it would be more advisable to purchase a small tub on purpose, a pail being somewhat with the smallest.—Here follows the receipt.

	£.	s.	d.
One peck of malt	0	1	6
A quarter of a pound of liquorice root	0	0	2
_____ of Spanish liquorice	0	0	0
_____ of essentia	0	0	2
_____ of colour	0	0	2
Half a pound of treacle	0	0	1
A quarter do. of hops	0	0	4
Capficum and ginger	0	0	1
Coals	0	0	6
	0	3	1

This will produce six gallons of good

beer, which bought is

Brewed at home for

Leaves clear gain

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Surely

Surely this is enough to pay for time and trouble ; and perhaps, particularly in London, a woman might not in the same time be able to earn one penny. By following this plan, then, every woman will earn something ; for money saved is money got.

This liquor will be drinkable in a week, and be perfectly wholesome and palatable.—Remember to bruise the liquorice root.

From this candid and open statement of the articles used in porter, every person may adopt the plan proposed by this Treatise of brewing for himself.

If it is objected, that many persons are ignorant of the art of brewing ; to remedy this defect, some instructions, few in number, but quite sufficient, shall here have a place : and if they are followed regularly, every person will, by a single trial, be convinced of the possibility and propriety of providing for his family in future, by a cheaper and more pleasing method than recurring to a public-house for every pint of beer, which the wants of nature may demand.

Every person intending to brew for himself, must be careful to see his malt measured and ground, by no means trusting to the cornchandlers, who frequently impose, both in quality and quantity, on those who are so incautious as not to see their malt measured and ground in their own presence.

The tubs and vessels intended for use, must be carefully inspected, and proved to be free from dirt or taint, as the least defect of that nature may distaste a whole brewing.

The

The mash-tub should be particularly attended to, and a wisp of clean hay or straw put over the end of the vessel in the inside, to prevent the malt running off with the liquor. The malt being emptied into the mash-tub, and the water brought to boil, dash the boiling water in the copper with cold water sufficient to stop the boiling, and leave it just hot enough to bite smartly upon your finger: a few trials will enable any person to be exact upon this head. ^pBrewers use a thermometer containing 212 degrees, which is boiling heat: the first mash is usually taken at 180 hot, and the second 190 hot; but as few persons will have opportunity, or afford expense to purchase a brewing thermometer, the foregoing rule will be found sufficiently instructive by a little practice, always remembering to draw off your second mash somewhat hotter than the first. The water being thus properly brought to a temper by the addition of cold water, lade it out of your copper over the malt, till it becomes thoroughly wet, mashing it well, to prevent your malt clotting; when the water goes on too hot, it sets the malt, and closes the body of it; and when that happens it is difficult to recover it, which can only be done by adding cold water. By setting the malt is to be understood, its closing the body of the grain, instead of opening it so as to dissolve in the liquor. Cover up your mash-tub close, to compress the steam, and prevent the heat from evaporating; in small quantities this should carefully be regarded, in larger ones it does not signify so much.

Let your worts stand after mashing an hour and a half or two hours, then let the liquor run

off into a vessel prepared to receive it; if at first it runs thick and discoloured, draw off one or two pails full, and pour it back again into the mash-tub, to refine again till it runs clear.

In summer it will be necessary to put a few hops into the vessel which receives the liquor out of the mash-tub, to prevent its turning sour, which the heat of the weather will sometimes endanger. Let your second mash run as before; and let the liquor stand an hour and a half, then run it off, but never let your malt stand dry: keep lading fresh liquor over it till the quantity of wort you wish to get is extracted, always allowing for waste in the boiling. The next consideration is boiling of the wort. The first copper full must be boiled an hour, and while boiling add the ingredients, except ginger and coculus berries mentioned in the receipt. The hops are now to be boiled in the wort, but to be carefully strained from the first wort, in order to be boiled again in the second. Eight pounds is the common proportion to a quarter of malt; but in summer, the weather being hotter, the quantity must be varied from 8lb. to 12lb. according to the heat of the air. After the wort has boiled an hour, lade it out of the copper, and cool it; keeping it as thin as possible, to cool it quicker: in summer it should be quite cold before it is set to work; in winter it should be kept till a small degree of warmth is perceptible by the finger. When properly cooled, set it to work: add yeast in proportion to your wish to bring it forward. If you want it to work quick, add from one gallon to two, but observe porter should be brought forward quicker than any other liquor, except two-penny;

penny; let it work till it comes to a good deep head, then cleanse it, by adding the ginger. Your liquor is now fit for barrelling, which must be done carefully; fill your barrels full, and let the yeast work out, adding fresh liquor to fill them till they are quite full and have done working; then bung your barrels, but keep a watchful eye upon them for some time, lest the beer should suddenly ferment again, and burst them, which is no uncommon accident where due care is not taken: heat of summer, or sudden change of weather, will occasion the same misfortune, if your barrels are not watched, and eased, when they require it, by drawing the peg. The only part which now remains to complete your brewing is fining your beer; to understand which, it is necessary to remark that porter is composed by brewers of three different sorts of malt, pale, brown, and amber; the reason of using these three sorts is to attain a peculiar flavour and colour. Amber is the most wholesome, and I would recommend to use nothing else. In consequence of the subtileness of the essentia, which keeps continually swimming in the beer, porter requires a considerable body of finings: but should any of my readers chuse to brew without essentia, with amber malt, and with colour only, their porter will refine of itself very soon. Some, however, will perhaps follow the exact receipt; and therefore I mention that finings are composed of isinglass dissolved in stale beer, till the whole comes to a thin gluey consistence, like size, and which must be used discretionally: one pint is the usual proportion to a barrel; but sometimes two, and even three, are found necessary.

Particular

Particular care must be taken that the stale beer in which the isinglass is dissolved be perfectly clear and thoroughly stale.

By attending to these directions, any person may brew as good, if not better porter than can be supplied from the publicans. Many notions have been artfully raised in the public mind, that porter requires to be brewed in large quantities, and to be long stored, to render it sound and strong; but let any impartial person give this receipt and these rules a fair trial, and experience, the surest of all guides, and the best of all instructors, will prove the falsehood of those prejudiced conceptions, which have had their origin with the ignorant, and have been cherished by the interested. One brewing under another will afford ample time for porter to refine for use, and every person can best judge of the extent of his consumption. Porter is not the better for being brewed in large quantities, except that the same trouble which brews a peck will brew a bushel; and I know by experience, that a peck of malt brewed over a fire in a kettle or a saucepan, under the guidance of these rules, will produce porter as good and as wholesome as that which is usually paid for at the public-house; and if but one industrious family in ten throughout this great metropolis, and in the many large towns where porter is now brewed, is induced to try the experiment, I have no doubt of their continuing themselves and recommending to others a practice which will be found simple and easy in its operations, essentially useful in point of health and convenience, and extremely moderate in point of trouble and expense.

Having

Having thus clearly explained the nature, ingredients, and composition of porter, together with a certain method of brewing it, even in the smallest quantity, I shall give a receipt for ale, twopenny, and table-beer. What is to be said upon each will be very short, because the same method in almost every respect as I have previously laid down for porter is to be pursued. It is only necessary to observe, that the gains of the common brewers who have opportunities and finances to buy the various articles in large quantities must be enormous to a degree, when the savings of a small family are so considerable.

The following proportions will be found exact for brewing one barrel of ale.

	£.	s.	d.
Malt $2\frac{1}{2}$ bushels	—	—	0 15 0
Hops $2\frac{1}{2}$ lb.	—	—	0 3 0
Sugar just boiled up, allowing for fire and trouble in preparing, 3lb.	—	0	2 6
Capficum 1d. coriander seeds 1d.	—	0	0 2
Cocculus Indicus 1d. salt 1d.	—	0	0 2
			1 0 10

The small beer, after your ale is brewed, is supposed an equivalent for coals:

	£.	s.	d.
A barrel of ale 128 quarts, at 5d. per quart bought at the publican's	—	2	13 4
Ditto brewed at home	—	1	0 10
Clear gain	—	1	12 6

Obfer-

Observations on Ale.

Ale is generally brewed from pale malt ; but that is merely an optional point, some persons preferring brown, some amber ales.

The capficum and coriander seeds are to be boiled in the wort ; observe the method of boiling, mashing as in porter, but let ale stand to work two or three days, and beat it up well once or twice a day when the head begins to fall. Cleanse it by adding a handful of salt, and a little flower mixed up with the cocculus Indicus ; then proceed to barrel it according to the foregoing directions.

The only article which deserves particular attention in the composition of ale, is the coriander seed, which, though in appearance a simple and almost tasteless berry, is of a vehemently poisonous and stupifying quality. Some idea may be formed of its effects, when chymical experiment has proved to us, that one pound of coriander seeds equals in strength and stupefactive quality one bushel of malt ; it is not therefore to be presumed that those who brew for themselves will use an ingredient, which can only have been introduced into the composition of ale, to satisfy an avaricious desire of an unjust gain.

Twopenny is an article not formed to keep, and is not likely to be brewed by any person for his own consumption. The following sketch of the proportion of one barrel, is inserted only to gratify public curiosity, and conduce to general information in the art of brewing.

Two-

Twopenny—One Barrel.

				<i>l.</i>	<i>s.</i>	<i>d.</i>
Malt 1½ bushel	—	—	—	8	9	0
Hops 1lb.	—	—	—	0	1	9
Liquorice root 1½lb.	—	—	—	0	1	6
Capficum ¼ oz.	—	—	—	0	0	1
Spanish liquorice 2 oz.	—	—	—	0	0	3
Treacle 5lb.	—	—	—	0	1	3
				0	13	10

One barrel of twopenny paid for at the publican's, 128 quarts at 4d. — 2 2 8

Brewed at home, coals included — 0 14 6

Clear gain — 1 8 2

It is sufficient to observe of this liquor, that it requires no storing, being frequently brewed one week and consumed the next; its principal property as an article of trade, is turning money over quicker than any other.

You will observe the quantity of capficum in one barrel of twopenny is as much as is commonly contained in two barrels of porter; this readily accounts for the preference given to it in cold winter mornings as a warmer to the stomach.

Twopenny works also remarkably quick; and must be carefully attended to in the barrels.

Table beer may be serviceable to a large family, and therefore the estimate is given upon a larger proportion.

Table Beer—Ten Barrels.

			£.	s.	d.
Malt 1 quarter	—	—	2	2	0
Hops 8lb.	—	—	0	9	4
Colour 8lb.	—	—	0	6	8
Spanish liquorice 8 oz.	—	—	0	0	8
Treacle 10lb.	—	—	0	2	6
Coals	—	—	0	4	0
			3	5	2
Ten barrels at 16s. per barrel bought			8	0	0
Ten ditto brewed at home	—	—	3	10	2
Clear gain	—	—	4	14	10

Liquorice root and other flavours may be added. What are here inserted are only the most general, and (as some suppose) indispensable requisites.

Having thus completed the general receipts and instructions for procuring the several liquors, it may not be amiss, to promote general knowledge, to give a slight sketch of the properties of each article, that every person may chuse his own ingredients, and increase or decrease their various proportions, as may best suit his taste, opinion, or convenience.

Malt is a wholesome nutritious grain, containing a soft balsamic oleaginous essence, highly agreeable to the palate, and healthful to the constitution; but by no means intoxicative, except when used in very large quantities. The intoxicating qualities of porter are to be ascribed to the various drugs intermixed with it; it is evident some porter is more heady than other, and it arises from the greater

greater or less quantity of stupefactive ingredients. Malt, to produce intoxication, must be used in such large quantities as would very much diminish, if not totally exclude the brewer's profit, when porter is retailed at seven farthings the pint.

Pale malt is most nutritive, being, from the tender method of drying it, nearest to the original barleycorn; it likewise contains more of the alcalous and balsamic qualities, than the brown malt, which, enduring a greater degree of fire in the kiln, is sometimes so crusted and burnt, that its mealy part loses a great share of its essential salts and vital properties.

Amber malt is that which is dried in a middle degree, between pale and brown, and is now much in use, being the most pleasant, and free of either extreme. I would therefore recommend the use of it.

Hops are an aromatic grateful bitter, very wholesome, and undoubtedly efficacious in giving both flavour and strength to the beer.

Yeast is necessary to give the liquor that portion of elastic air, of which the boiling deprives it. Observe, without fermentation or working, no must or worts, however rich, can inebriate.

Sugar is a pleasant nutritive extract, and forms the main body of beer, when boiled to a proper temper for essentia, and for what is called colour: it answers both for malt and hops, being in a part an agreeable sweet, and in part a pleasant bitter. Sugar is likewise a keeper of beer, and gives it that substance which improves with age; it is likewise a cheap substitute for malt, 6lb. being, as was before observed, equal to one bushel of malt. I would therefore advise every person to

use sugar prepared for colour; the essentia I leave optional.

Liquorice root is pleasant, wholesome, keeps the body gently laxative, and opposes the coſſive quality of ſome of the other ingredients; it ought therefore to be uſed, as ſhould Spaniſh liquorice, which is of the ſame quality. Porter is ſaid to feed people to incline to corpulency. Nothing is more neceſſary than to keep the body regular, and therefore liquorice is, doubtleſs, one of the moſt ſalutary ingredients of porter, carrying off the pernicious effects of the other compounds, and producing that regular habit which is the foundation of corpulency.

Capſicum diſperſes wind and crudities cauſed by indigeſtion: properly uſed, it cannot be unhealthful. It leaves a warm glow in the ſtomach, which is perceptible on drinking ſome beers; but it ſhould be carefully made uſe of.

Ginger has the effects of capſicum; it furthermore cleanſes and flavours beer: but capſicum being cheaper is more uſed, and by its taſteleſs, though extremely hot quality, cannot be ſo readily diſcerned in beer as ginger.

Treacle partakes of many of the properties of liquorice, is a laxative, and inclines to gentle perſpiration. By thus promoting the natural ſecretions, it muſt be a principal means of rendering porter and beer in general wholeſome and healthy. Treacle is alſo a cheaper article than ſugar, and answers the purpoſes of colour, where the beer is intended for immediate conſumption; but in ſummer, where a body is required to withſtand the temperature of the air, and the draught is not ſo quick, ſugar alone can give body to
porter,

porter. Treacle will therefore be a discretionary article.

Coriander seed, used principally in ale, is pernicious, not to say poisonous in the highest degree, and the use of it affords one of the many proofs of the little regard paid to the health of society, by interested persons.

Cocculus Indicus, commonly called oculus India berries, is poisonous, stupefactive, and unlawful; but being of excessive strength to attack the head, and when ground into a fine powder undiscoverable in the liquor, is but too much used, to the prejudice of the public.

Heading—salt of steel is the most proper, though not to be recommended; but a mixture of alum and copperas, being much cheaper, has obtained the preference. Alum is a great drier, and causes that thirst which some beers occasion, so that the more you drink, the more you want. Alum gives likewise a smack of age to beer, and is penetrating to the palate. The properties of copperas are well known as dangerous and destructive, and therefore need no comment.

Salt is highly useful in all beers; it gives a pleasing relish, much as it does to meat, and also fines the liquor.

Having thus analyzed beer, and presented its various component parts to public view, I shall leave a choice to every individual to prepare to his own taste. When a man has been long blind, and has his eyes opened, it does not often happen that he walks into a ditch.

Here however, further to promote general information, I must add that, by act of Parliament, no common brewer shall have in his house

or

or brewhouse, more than 10lb, of sugar or treacle, under the penalty of 100l. ; but the public need not be told how easy it is for those who have large detached warehouses, cooperages, &c. &c. to make compounds, or prepare any ingredients, where excisemen and informers have no access; and as the persons employed in their preparation are subject to the penalties of the law, it will cease to be wonderful that no information takes place. It is not therefore men of large capitals who are endangered by this act, but small beginners, who have not conveniences to prevent discovery, and yet cannot get a livelihood without disobeying the injunctions of the legislature of the country.

I shall now conclude with recommending to all persons to make the experiment, and I am persuaded they will be convinced of the propriety of brewing for themselves; they can suit themselves in taste, in strength, in flavour, in quantity; they will have beer much cheaper—they will have it more wholesome. Every person may judge of his own taste in beer: grains of paradise, which are of a warm and pleasant quality, cardamum seeds, and cinnamon, linseed, allspice, and a variety of flavours, may be chosen by different persons. Much unnecessary time spent in public-houses will be saved, much unprofitable discourse avoided, much waste of liquor prevented;—malt and hops may be had any where, sugar is not difficult to be got; and here perhaps may be seen the reason of the increased demand for sugar of late years, since porter has become an article of exportation, and is brewed in almost every considerable town and city in Eng-

England. The other necessary articles are neither scarce nor dear, so that no reasonable objection can be urged against the plan. Women can perform the task; and in families where the wife has not much to do, brewing will be both a profitable and pleasurable employment; nothing can be easier. Women are the chief home-brewers throughout England; and I have endeavoured to render every part intelligible and easy to the meanest capacity. Many books, apparently written to instruct, are really intended to blind, perplex, and confound. Most books on brewing are of that stamp. Brewing has been a species of monopoly, and monopolists are always avaricious. If it should be urged, that brewing upon this plan would diminish the revenue, I answer, it would not. The increased consumption of malt and sugar, which both pay heavy duties, would more than counterbalance the loss of the excise, and the saving made in small hard-working families would be a comfortable relief, and prevent much of that spirit of complaint which now pervades the nation. The only persons who might, and that is all chance, sustain an injury, would be great brewers, who have large fortunes, and small publicans, which the legislature and police seem apparently equally anxious to diminish. The author has no wish to injure any man, he only means to benefit the community; he has discharged his duty by laying his plan before the public, and it rests with them to make a proper use of it: that they may do so, is his most ardent desire, and render themselves, families, friends, and society happy, by diminishing their expenses, making serviceable
much

much mispent time, enjoying themselves without injury to their own constitution; and enabling themselves to pay such taxes as the constitution of the country imposes upon them. This he is certain may be done; the road is direct, the instruction plain—"Withdraw from the public house, and brew your own beer."

APPEN.

(82)

APPENDIX.

SEVERAL necessary observations on the method of brewing have occurred to me since the first publication of this Treatise: I thought I could not render the public a better service than by throwing them into the shape of an Appendix, for the fuller information and advantage of those who have already adopted my plan; and I do this with more pleasure, as it affords me an opportunity of acknowledging the candid and liberal reception which my small efforts to serve the public have been honoured with.

With regard to the quantity of hops, it escaped me to observe, that, as tastes are different, no regular or fixed rule can be given, but every person must be left to adjust, by experience, that quantity which best suits his palate or convenience.

If in boiling you make several worts, boil the first one hour, the second one hour and a half, the third two hours; so that you fully extract the virtue out of the hops. Be likewise very careful not to put your wort together when too warm. If you use a thermometer, put your table-beer together between 60 and 70 degrees, in winter—ale at 50. In summer you cannot make it too cold.

Different conveniences of cellaring will not materially affect beer. If you have but a in-

different cellar, you should brew only for present use; in which case, six weeks will be found a very proper space between brewing and brewing.

For where beer is kept too long in a bad cellar, so as to be affected by the heat of the weather, it will stink, though ever so well bunged. For heat opens the pores of the wood, and allows the spirit to evaporate; and after the evaporation, the beer being affected exactly in the same manner as meat is by the sun, will stink. Hops will not prevent this accident happening to beer; they only prevent its turning sour.

A number of persons, not possessed of this necessary knowledge, and not reflecting upon the influence of the air; as soon as summer approaches, begin to think directly of brewing ale, which seldom or never is so good as beer brewed in a proper season. For instance, the extreme variations of heat in this country are from 16 to 88 degrees. Now, in a brewing at 16 degrees, great care must be taken it does not get too cold; whereas, in a brewing at 88, you will hardly be able to get it cold enough, and must take the dead of the night to reduce it down to a medium heat, which should be about 60. This observation is too striking not to enforce upon every one's mind the necessity of carefulness and attention in this respect; for as the pressure of the air confines the mercury down to the 16th degree, so does it also confine the spirit of the beer; and beer standing in an open tub, under that temperature of the air, would keep better than beer
ever

ever so well casked and bunged, when affected by the extreme heat of summer.

The effect on wort when working is exactly the same; in cold weather the spirit of the beer is confined, and it is thereby rendered more kind and free to work itself clear. Whereas, in hot weather, the spirit quickly evaporates, thereby leaving the must vapid and flat, unable to work itself clear, but keeping continually on the fret, till totally spoiled.

This is the obvious reason for the use of sugar prepared for colour, because sugar will bear the heat better than malt, and when thoroughly prepared possesses such a strong principle of heat in itself, as to bid defiance to the hottest temperament of air, and to render its turning sour impossible. As an instance of its quality,

I have known two casks of the same brewing sent in, one prepared with colour, and charged 30s. the other without, charged 14s.; upon tasting of both, the cask prepared with colour was very much commended, and the other returned as not drinkable.

Clean casks are another essential object in brewing good beer. To keep your casks sweet and in order, never allow them to remain open, but whenever you have drawn off the beer bung them up tight with the lees within them, and in a good cellar they will never spoil. Should by accident your casks get musty, or not sweet, the following method will remedy the evil: soak them well for two or three days in cold water, then fill them full of boiling water, put in a lump or two of lime, shake it thoroughly till quite dissolved; let them stand about half an

hour, then wash them out with cold water, and they will be clean and sweet.

The following remarks may sometimes be useful :

To make new beer appear older, use oil of vitriol.

To make beer fine quick, boil in it hartshorn shavings.

To soften beer when it is grown stale, mix with it, after you have drawn it to drink, a little salt of wormwood, or a little oyster-shell powder.

These are the principal remarks which the author thought would be required by the public, in order to render this Treatise on Brewing correct and plain; and now having finished the task he had imposed upon himself, and having seen his work run rapidly through five editions, in answer to the many inquiries which have been made, the questions which have been put, and the letters which have been sent to him, he solemnly declares—That he published the work solely for the public good; that he was neither influenced by envy at those who have made fortunes by the secrets here exposed, nor by any private wish of particular gain to himself, but by a desire to soften the hardships of the industrious poor; and in this point of view, he trusts, the candid and impartial will consider his book, as one step attempted to ameliorate the condition of the labouring part of mankind.

TO BOTTLE PORTER.

IT has been supposed by many persons, that in bottling porter there is some preparation made use of, not generally understood: I wish my readers, therefore, to be assured that nothing more is necessary to produce good bottled porter than the following rules:

Let your bottles be clean washed and drained dry—your corks sound and good, for this is essential—fill your bottles on one day, and let them stand open till the next—this will bring your beer to a proper flatness, and prevent the corks from flying, or the bottles from being so frequently burst.

Let the bottles be corked as close as possible.

*** These rules will apply equally well to the bottling of Ales.*

SAMUEL CHILD.

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